

Amendments to the Claims

This listing of claims will replace all prior versions of claims in the application.

1-11. (Canceled)

12. (New) A light-emitting diode device comprising a light-emitting diode element, a circuit board, a fluorescent material-containing resin, a lens and a fluorescent material-containing resin sealing frame, wherein said circuit board is adhered to the sealing frame by an adhesive sheet comprising

the reaction product of a thermoplastic polymer containing epoxy groups, a thermoplastic polymer which contains no epoxy group, and a compound containing functional groups which are addition reactive with epoxy groups, or a polymerization catalyst which can effect a ring opening polymerization of the epoxy groups,

and in which said thermoplastic polymer is cross-linked so that its flowability is restrained.

13. (New) The light-emitting diode device of claim 12, wherein said thermoplastic polymer containing epoxy groups is a polyolefinic copolymer containing epoxy groups.

14. (New) The light-emitting diode device of claim 12, wherein said thermoplastic polymer containing epoxy groups is obtained by copolymerizing a vinyl groups-containing monomer with an epoxy groups-containing monomer which is copolymerizable with said vinyl groups-containing monomer.

15. (New) The light-emitting diode device of claim 12, wherein the cross-linking structure of said thermoplastic polymer is formed by an irradiation of an electron ray.

16. (New) The light-emitting diode device of claim 12, wherein said adhesive sheet comprises a polymerization catalyst by which epoxy groups can be ring opened polymerized, and wherein the cross-linking structure of said thermoplastic polymer is formed by ring opening polymerization of the epoxy groups by said polymerization catalyst with the irradiation of a ultraviolet ray or the application of heat.

17. (New) The light-emitting diode device of claim 12, which comprises a composition comprising

10 to 95 mass % of a polyolefin copolymer containing epoxy groups in its molecule, as a thermoplastic polymer containing epoxy groups,

4 to 80 mass % of a polyolefin copolymer containing carboxylic acid ester groups in its molecule, as a thermoplastic polymer containing no epoxy groups, and

1 to 20 mass % of a rosin containing carboxyl groups in its molecule, as a compound containing functional groups which are addition reactive with said epoxy groups, and wherein said composition is irradiated with an electron ray to form a cross-linking structure therein.

18. (New) The light-emitting diode device of claim 12, wherein the thermoplastic polymer flow property is 110 to 210 %.

19. (New) A light-emitting diode device according to claim 12, wherein said sealing frame has functions of reflectivity and heat-radiation property.

20. (New) The light-emitting diode device of claim 12 further comprising a reflecting plate and a heat-radiation plate or box, wherein said circuit board is adhered by the adhesive sheet to the heat-radiation plate or box, or to the reflecting plate.